

Post Harvest Complex - Small

	Item	Comments
1	Pre cooling system Supplying a complete pre-cooling systems consisting of: a) Two air cooled condensing units equipped with semi-hermetic compressors . Unit cooling capacity is 31.6 kw @ -5 ⁰ C sst & 46 ⁰ C amb. <i>Accessories to include :</i> High & low pressure cutout + Oil pressure cutout + CCH + Vibration mounting . b) Two Evaporators with Cooling capacity kw @ – ⁰ C sst & DT=8K . Equipped with : Sufficient and additional defrost heaters Insulated drain pan c) Exhaust tunnel fans (short cased) : Two axial 6.3 kw / 1450 rpm motor fans Each fan duty : 13000 CFM @ 1.8 in. wg C/W gravity louvers & steel mountings . d) Refrigerant seamless (type K) copper piping net-work for previously mentioned refrigeration equipments, C/W R22 charge , all controls , safety valves and all accessories for perfect and safe operation . Complete set of accessories : Suction accumulators - Shell type driers – Moisture-Liquid indicators Danfoss expansion valves ...etc.	
		Comments
1	Pre Cooling System (continued) f) Weatherproof (IP 55) control & running switch boards and all cables and wiring to be in suitable conduits between the erected equipments and all electrical accessories required for perfect and safe operation . Under temp. safety protection will be added . As per book of specifications	
2	Cold store : Supplying a complete cooling system for each room consisting of : a) Two air cooled condensing units each	

	equipped with semi-hermetic compressor . Unit cooling capacity is 21.0 kw @ -50C sst & 46 ⁰ C amb. Accessories to include : High & low pressure cutout + Oil pressure cutout + CCH + Vibration mounting .	
	b) Two evaporators , each has a cooling capacity . kw @ – ⁰ C sst & DT=8K . Equipped with : Sufficient electrical defrost heaters Insulated drain pan Extra heaters	
	c) Refrigerant seamless (type K) copper piping net-work for previously mentioned refrigeration equipment C/W R22 charge , all controls , safety valves and all accessories for perfect and safe operation	
		Comments
2	Cold Store (continued) Complete set of accessories : Shell type drier – Moisture-Liquid indicator - Suction accumulator - Danfoss expansion valve ...etc.	
	e) Weatherproof (IP 55) control and running switch boards and all cables and wiring to be in suitable conduits between the erected equipments and all electrical accessories required for perfect and safe operation . As per book of specifications	
3	Installation , commissioning and start up of all the above mentioned two items in proper condition . Handing over certificate for one year guarantee . - Four pre-cooling tunnels . -Two cold storage room	
4	Sandwich panel construction Supplying and installing , polyurethane 10 cm thick between 2 layers of 0.5mm painted galvanized metal sheets . Panels are for the walls and exhaust fan wall . Each Pre-cooling room : 10 x 7 x 4.3 plenum panel and two service hinged doors. Each cold room : 10 x 10 x 4.3 mt C/W alum. caps , PVC curved corners , Silicon finishetc.	Note: 1010 is the meter squared of 10 cm thick sandwich panel needed

		Comments
5	Supplying and installing sandwich insulation panels, polyurethane 5 cm thick between 2 layers of 0.5mm painted galvanized metal sheets . Panels are for packing area walls and ceilings + the corridor & loading ceiling only	Note: 1315 is the meter squared of 5 cm thick sandwich panel needed
6	Supplying and installing floor insulation of the cooled area to be two layers of 5 cm Extruded styropore (blue boards) having av. density not less than 30 kg/m3 Covered with 80 micron plastic sheets and 10 cm overlap .	Note: 340 is the meter squared of extruded styropore insulation needed
7	Supplying and installing high quality insulated sliding doors of pre-fabricated sandwich panels 10 cm polyurethane thickness with door accessories of hard coated steel or heavy PVC. Door opening is . × . m . Strip curtain on each door opening .	
8	Supplying and installing electric tarp for the pre-cooling tunnel .	
9	Supplying and installing heavy guage steel tubes fixed on concrete finish floor for exit & inlet S. Panels doorways and doors protection	
10	Supplying and installing fog system humidifier with electronic display and digitally controlled , for each cold store only.	
		Comments
11	Lighting to be suitable for the room temperature C/W all wirings , conduites , switches and accessories for proper installations .	
12	Loading Bay consists of the following : 1- Hydraulic leveler 2 x 3 mt , C/W IP 65 electric board 2- Electric 3 mt hieght Roll-over door . 3- Shelter C/W bumpers for shock absorbing	
13	Packing House Equipment Tables, rollers, scales, hand jacks, etc...	